



#5

SEQUENCE LISTING

<110> Afar, Daniel
Hubert, Rene S.
Leong, Kahan
Raitano, Arthur B.
Saffran, Douglas C.
Mitchell, Steve Chappell

<120> PEPTIDES DERIVED FROM STEAP1 (AS AMENDED)

<130> 511582001601

<140> US 10/010,667

<141> 2001-12-06

<150> 09/323,873

<151> 1999-06-01

<150> 60/087,520

<151> 1998-06-01

<150> 60/091,183

<151> 1998-06-30

<160> 32

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 1195

<212> DNA

<213> Homo Sapiens

<400> 1

ccgagactca	cggcgaagct	aaggcgaaga	gtgggtggct	gaagccatac	tattttatag	60
aattaatgga	aagcagaaaa	gacatcacaa	accaagaaga	actttggaaa	atgaagccta	120
ggagaaattt	agaagaagac	gattatttgc	ataaggacac	gggagagacc	agcatgctaa	180
aaagacctgt	gcttttgcac	ttgcacaaa	cagcccatgc	tgatgaattt	gactgccctt	240
cagaacttca	gcacacacag	gaactctttc	cacagtggca	cttgccaatt	aaaatagctg	300
ctattatagc	atctctgact	tttctttaca	ctcttctgag	ggaagtaatt	caccctttag	360
caacttccca	tcaacaatat	ttttataaaa	ttccaatcct	ggtcatcaac	aaagtcttgc	420
caatgggttc	catcactctc	ttggcattgg	ttacctgcc	aggtgtgata	gcagcaattg	480
tccaacttca	taatggaacc	aagtataaga	agtttccaca	ttggttggat	aagtggatgt	540
taacaagaaa	gcagtttggg	cttctcagtt	tcttttttgc	tgtactgcat	gcaatttata	600
gtctgtctta	cccaatgagg	cgatcctaca	gatacaagtt	gctaaactgg	gcatatcaac	660
aggtccaaca	aaataaagaa	gatgcctgga	ttgagcatga	tggttggaga	atggagattt	720
atgtgtctct	gggaattgtg	ggattggcaa	tactggctct	gttggctgtg	acatctattc	780
catctgtgag	tgactctttg	acatggagag	aatttcacta	tattcagagc	aagctaggaa	840
ttgtttccct	tctactgggc	acaatacacg	cattgatttt	tgcctggaat	aagtggatag	900
atataaaa	cttatttatg	tatacacctc	caacttttat	gatagctgtt	ttccttccaa	960
ttgttgcct	gatattttaa	agcatactat	tcctgccatg	cttgaggaag	aagatactga	1020
agattagaca	tggttgggaa	gacgtcacca	aaattaacaa	aactgagata	tgttcccagt	1080
tgtagaatta	ctgtttacac	acatttttgt	tcaatattga	tatattttat	caccaacatt	1140
tcaagtttgt	atttgttaat	aaaatgatta	ttcaaggaaa	aaaaaaaaaa	aaaaa	1195

<210> 2
 <211> 339
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> DNA

<400> 2
 Met Glu Ser Arg Lys Asp Ile Thr Asn Gln Glu Glu Leu Trp Lys Met
 1 5 10 15
 Lys Pro Arg Arg Asn Leu Glu Glu Asp Asp Tyr Leu His Lys Asp Thr
 20 25 30
 Gly Glu Thr Ser Met Leu Lys Arg Pro Val Leu Leu His Leu His Gln
 35 40 45
 Thr Ala His Ala Asp Glu Phe Asp Cys Pro Ser Glu Leu Gln His Thr
 50 55 60
 Gln Glu Leu Phe Pro Gln Trp His Leu Pro Ile Lys Ile Ala Ala Ile
 65 70 75 80
 Ile Ala Ser Leu Thr Phe Leu Tyr Thr Leu Leu Arg Glu Val Ile His
 85 90 95
 Pro Leu Ala Thr Ser His Gln Gln Tyr Phe Tyr Lys Ile Pro Ile Leu
 100 105 110
 Val Ile Asn Lys Val Leu Pro Met Val Ser Ile Thr Leu Leu Ala Leu
 115 120 125
 Val Tyr Leu Pro Gly Val Ile Ala Ala Ile Val Gln Leu His Asn Gly
 130 135 140
 Thr Lys Tyr Lys Lys Phe Pro His Trp Leu Asp Lys Trp Met Leu Thr
 145 150 155 160
 Arg Lys Gln Phe Gly Leu Leu Ser Phe Phe Phe Ala Val Leu His Ala
 165 170 175
 Ile Tyr Ser Leu Ser Tyr Pro Met Arg Arg Ser Tyr Arg Tyr Lys Leu
 180 185 190
 Leu Asn Trp Ala Tyr Gln Gln Val Gln Gln Asn Lys Glu Asp Ala Trp
 195 200 205
 Ile Glu His Asp Val Trp Arg Met Glu Ile Tyr Val Ser Leu Gly Ile
 210 215 220
 Val Gly Leu Ala Ile Leu Ala Leu Leu Ala Val Thr Ser Ile Pro Ser
 225 230 235 240
 Val Ser Asp Ser Leu Thr Trp Arg Glu Phe His Tyr Ile Gln Ser Lys
 245 250 255
 Leu Gly Ile Val Ser Leu Leu Leu Gly Thr Ile His Ala Leu Ile Phe
 260 265 270
 Ala Trp Asn Lys Trp Ile Asp Ile Lys Gln Phe Val Trp Tyr Thr Pro
 275 280 285
 Pro Thr Phe Met Ile Ala Val Phe Leu Pro Ile Val Val Leu Ile Phe
 290 295 300
 Lys Ser Ile Leu Phe Leu Pro Cys Leu Arg Lys Lys Ile Leu Lys Ile
 305 310 315 320
 Arg His Gly Trp Glu Asp Val Thr Lys Ile Asn Lys Thr Glu Ile Cys
 325 330 335
 Ser Gln Leu

<210> 3
 <211> 111

<212> DNA
<213> Homo sapiens

<400> 3
ggcggaggcg gagggcggagg gcgaggggagc gggagcgccg cctggagcgc ggcagggtcat 60
attgaacatt ccagatacct atcattactc gatgctgttg ataacagcaa g 111

<210> 4
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 4
actttgttga tgaccaggat tgga 24

<210> 5
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 5
cagaacttca gcacacacag gaac 24

<210> 6
<211> 3627
<212> DNA
<213> Homo sapiens

<400> 6
ggggcccgca cctctgggca gcagcggcag ccgagactca cgggtcaagct aaggcgaaga 60
gtgggtggct gaagccatac tattttatag aattaatgga aagcagaaaa gacatcacaa 120
accaagaaga actttggaaa atgaagccta ggagaaattt agaagaagac gattatttgc 180
ataaggacac gggagagacc agcatgctaa aaagacctgt gcttttgcac ttgcacacaa 240
cagcccatgc tgatgaattt gactgccctt cagaacttca gcacacacag gaactctttc 300
cacagtggca cttgcccaatt aaaatagctg ctattatagc atctctgact tttctttaca 360
ctcttctgag ggaagtaatt cacccttag caacttccca tcaacaatat ttttataaaa 420
ttccaatcct ggtcatcaac aaagtcttgc caatggtttc catcactctc ttggcattgg 480
tttacctgcc aggtgtgata gcagcaattg tccaacttca taatggaacc aagtataaga 540
agtttccaca ttggttggat aagtggatgt taacaagaaa gcagtttggg cttctcagtt 600
tcttttttgc tgtactgcat gcaatttata gtctgtctta cccaatgagg cgatcctaca 660
gatacaagtt gctaaactgg gcatatcaac aggtccaaca aaataaagaa gatgcctgga 720
ttgagcatga tgtttggaga atggagattt atgtgtctct ggggaatttg ggattggcaa 780
tactggctct gttggctgtg acatctattc catctgtgag tgactctttg acatggagag 840
aatttcaacta tattcaggta aataatatat aaaataaccc taagaggtaa atcttctttt 900
tgtgtttatg atatagaata tgttgacttt accccataaa aaataacaaa tgtttttcaa 960
cagcaaagat cttatacttg ttccaattaa taatgtgctc tcctgttggt ttccctattg 1020
cttctaatta ggacaagtgt ttccctagaca taaataaaag gcattaaaat attctttggt 1080
tttttttttt tgtttgtttg ttttttgggt gtttgggttg ttttttgaga tgaagtctcg 1140
ctctgttgcc catgctggag tacagtggca cgatctcggc tcaactgcaac ctgcgcctcc 1200
tgggttcagg cgattctctt gcctcagcct cctgagtagc tgggattaca ggcacccatc 1260
accatgtcca gctaattttt gtatttttag tagagacagg gttttcccat gttggccagg 1320

ctggtctcga	tctcctgacc	tcaaagtatc	cgccacacct	ggcctcccaa	agtgtctggga	1380
tgacagttgt	gagccaccac	actcagcctg	ctctttctaa	tatttgaaac	ttgttagaca	1440
atgtgtacc	catctaattg	gatattttag	gaatccaata	tgcatgggtt	attattttctt	1500
aaaaaaaaata	ttctttttacc	tgtcacctga	atttagtaat	gcctttttatg	ttacacaact	1560
tagcactttc	cagaaacaaa	aactctctcc	ttgaaataat	agagttttta	tctaccaaaag	1620
atatgctagt	gtctcatttc	aaaggctgct	ttttccagct	tacatttttat	atacttactc	1680
acttgaagtt	tctaaatatt	cttgtaattt	taaaactatc	tcagattttac	tgagggtttat	1740
cttctgggtg	tagattatcc	ataagaagag	tgatgtgcca	gaatcactct	gggatccttg	1800
tctgacaaga	ttcaaaggac	taaattttaat	tcagtcattga	acactgccaa	ttaccgttta	1860
tgggttagaca	tcttttgaaa	tttccacaag	gtcagacatt	cgcaactatc	ccttctacat	1920
gtccacacgt	atactccaac	actttattag	gcattctgatt	agtttggaag	gtatgcctcc	1980
atctgaatta	gtccagtgtg	gcttagagtt	ggtacaacat	tctcacagaa	tttcttaatt	2040
ttgtagggtc	agcctgataa	ccactggagt	tctttgggtcc	tcattaaata	gctttcttca	2100
cacattgctc	tgctgtttac	acatatgatg	aacactgctt	tttagacttc	atttcttaatt	2160
taggactgca	tcttgacaac	tgagcctatt	ctactatatg	tacaatacct	agcccataat	2220
aggtatacaa	tacacatttg	gtaaaactaa	ttttcaacca	atgacatgta	tttttcaact	2280
agtaacctag	aaatgtttca	cttaaaatct	gagaactggg	tacactacaa	gttaccttgg	2340
agattcatat	atgaaaacgc	aaacttagct	atgtgattgt	attcactggg	acttaagaat	2400
gcgcctgaat	aattgtgagt	tcgattttgt	ctggcaggct	aatgaccatt	tccagtaaag	2460
tgaatagagg	tcagaagtcg	tataaaagag	gtgtgtgtcag	aacaccgttg	agattacata	2520
ggtgaacaac	tattttttaag	caactttatt	tgtgtagtga	caaagcatcc	caatgcaggc	2580
tgaaatgttt	catcacatct	ctggatctct	ctattttgtg	cagacattga	aaaaattgtt	2640
catattattt	ccatgtttatc	agaatatttg	atttttttaa	aacataggcc	aagttcattc	2700
acttcattat	tcattttatca	aaatcagagt	gaatcacatt	agtcgccttc	acaactgata	2760
aagatcactg	aagtcaaatt	gatttttgct	ataatcttca	atctacctat	atttaattga	2820
gaatctaaaa	tgtacaaatc	attgtgttga	ttctgcagtg	atcctgctat	aagtaagact	2880
cagtcacctga	tttttaggtat	cctgtgaaaa	gcagaattaa	gacaaataca	caagagacaa	2940
agcacaaaaa	ataaatatca	taaggggatg	aacaaaaatg	tggagaaaga	gtagacaaaag	3000
tttttgatca	cctgccttca	aagaaaggct	gtgaattttg	ttcacttaga	cagcttggag	3060
acaagaaatt	acccaaaagt	aagggtgagga	ggataggcaa	aaagagcaga	aagatgtgaa	3120
tggacattgt	tgagaaatgt	gataggaaaa	caatcataga	taaaggattt	ccaagcaaca	3180
gagcatatcc	agatgaggta	ggatgggata	aactcttatt	gaaccaatct	tcaccaattt	3240
tgtttttctt	ttgcagagca	agctaggaat	tgtttccctt	ctactgggca	caatacacgc	3300
attgattttt	gcctggaata	agtggataga	tataaaacaa	tttgtatggg	atacacctcc	3360
aacttttatg	atagctgttt	tccttccaat	tgtgtcctcg	atattttaaaa	gcatactatt	3420
cctgccatgc	ttgaggaaga	agatactgaa	gatttagacat	ggttgggaag	acgtcaccaa	3480
aattaacaaa	actgagatat	gttcccagtt	gtagaattac	tgtttacaca	catttttgtt	3540
caatattgat	atattttatc	accaacattt	caagtttgta	tttgtttaata	aaatgattat	3600
tcaaggaaaa	aaaaaaaaaa	aaaaaaa				3627

<210> 7

<211> 519

<212> DNA

<213> Homo sapiens

<400> 7

gactttttaca	aaattcctat	agagattgtg	aataaaacct	tacctatagt	tgccattact	60
ttgtctctccc	tagtatacct	cgcagggtctt	ctggcagctg	cttatcaact	ttattacggc	120
accaagtata	ggagattttcc	accttggttg	gaaacctggg	tacagtgtag	aaaacagctt	180
ggattactaa	gtttttttctt	cgctatggtc	catgttgcc	acagcctctg	cttaccgatg	240
agaagggtcag	agagatat	gtttctcaac	atggcttacc	agcaggttca	tgcaaatatt	300
gaaaactctt	ggaatgagga	agaagtttgg	agaattgaaa	tgtatatctc	ctttggcata	360
atgagccttg	gcttactttc	cctcctggca	gtcacttcta	tcccttcagt	gagcaatgct	420
ttaaactgga	gagaattcag	ttttattcag	tctacacttg	gatatgtcgc	tctgtctata	480
agtactttcc	atgttttaatt	ttatggatgg	aaacgagct			519

<210> 8

<211> 173
 <212> PRT
 <213> Homo sapiens

<400> 8
 Asp Phe Tyr Lys Ile Pro Ile Glu Ile Val Asn Lys Thr Leu Pro Ile
 1 5 10 15
 Val Ala Ile Thr Leu Leu Ser Leu Val Tyr Leu Ala Gly Leu Leu Ala
 20 25 30
 Ala Ala Tyr Gln Leu Tyr Tyr Gly Thr Lys Tyr Arg Arg Phe Pro Pro
 35 40 45
 Trp Leu Glu Thr Trp Leu Gln Cys Arg Lys Gln Leu Gly Leu Leu Ser
 50 55 60
 Phe Phe Phe Ala Met Val His Val Ala Tyr Ser Leu Cys Leu Pro Met
 65 70 75 80
 Arg Arg Ser Glu Arg Tyr Leu Phe Leu Asn Met Ala Tyr Gln Gln Val
 85 90 95
 His Ala Asn Ile Glu Asn Ser Trp Asn Glu Glu Glu Val Trp Arg Ile
 100 105 110
 Glu Met Tyr Ile Ser Phe Gly Ile Met Ser Leu Gly Leu Leu Ser Leu
 115 120 125
 Leu Ala Val Thr Ser Ile Pro Ser Val Ser Asn Ala Leu Asn Trp Arg
 130 135 140
 Glu Phe Ser Phe Ile Gln Ser Thr Leu Gly Tyr Val Ala Leu Leu Ile
 145 150 155 160
 Ser Thr Phe His Val Leu Ile Tyr Gly Trp Lys Arg Ala
 165 170

<210> 9
 <211> 322
 <212> DNA
 <213> Homo sapiens

<400> 9
 ggtcgacttt tcctttattc ctttgtcaga gatctgattc atccatatgc tagaaaccaa 60
 cagagtgcact tttaaaaaat tcctatagag attgtgaata aaaccttacc tatagttgcc 120
 attactttgc tctccctagt ataccttgca ggtcttctgg cagctgctta tcaactttat 180
 tacggcacca agtataggag atttccacct tgggttgaaa cctgggttaca gtgtagaaaa 240
 cagcttgat tactaagttg tttcttcgct atgggtccatg ttgcctacag cctctgctta 300
 ccgatgagaa ggtcagagag at 322

<210> 10
 <211> 183
 <212> DNA
 <213> Homo sapiens

<400> 10
 tttgcagctt tgcagatacc cagactgagc tggaactgga atttgtcttc ctattgactc 60
 tacttcttta aaagcggctg cccattacat tcctcagctg tccttgagc taggtgtaca 120
 tgtgactgag tggtggccag tgagatgaag tctcctcaaa ggaaggcagc atgtgtcctt 180
 ttt 183

<210> 11
 <211> 448
 <212> DNA
 <213> Homo sapiens

<400> 11
aagaaggaga atccatttag cacctcctca gcctgggtca gtgattcata tgtggccttg 60
ggaatacttg ggTTTTTct gttgtactc ttgggaatca cttctttgcc atctgttagc 120
aatgcagtca actggagaga gttccgattt gtccagtcca aactgggtta tttgaccctg 180
atcttggtga cagcccacac cctgggtgtac ggtgggaaga gattcctcag cccttcaaat 240
ctcagatggg atcttcctgc agcctacgtg ttagggctta tcattccttg cactgtgctg 300
gtgatcaagt ttgtcctaata catgccatgt gtagacaaca cccttacaag gatccgccag 360
ggctgggaaa ggaactcaaa acactagaaa aagcattgaa tggaaaatca atatttaaaa 420
caaagttcaa tttagctgga aaaaaaaa 448

<210> 12
<211> 401
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(401)
<223> n = A,T,C or G

<400> 12
ggccgcggca nccgctacga cctgggtcaac ctggcagtca agcaggtctt ggccanacaa 60
gagccacctc tgggtgaagg aggaggtctg gcggatggag atctacctct ccctgggagt 120
gctggccctc ggcacgttgt ccctgctggc cgtgacctca ctgccgtcca ttgcaaaactc 180
gctcaactgg agggagttca gcttcgttca gtcctcactg ggctttgttg cntcgtgct 240
gagcacactn cacacgtca cctacggctg gacccgcgcc ttcgaggaga gccgctacaa 300
gttctacctn cctcccacct tcacgntcac gctgctgggt ccctgcgttc gttcatcctg 360
ggccaaagcc ctgtttntac tgccttgcat tcagccgnag a 401

<210> 13
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> RT-PCR Primer AI139607.1

<400> 13
ttaggacaac ttgatcacca gca 23

<210> 14
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> RT-PCR primer AI139607.2

<400> 14
tgtccagtcc aaactgggtt attt 24

<210> 15
<211> 23
<212> DNA
<213> Artificial Sequence

<220>

<223> RT-PCR primer R80991.1

<400> 15

agggagttca gcttcgttca gtc

23

<210> 16

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> RT-PCR primer R80991.2

<400> 16

ggtagaactt gtagcggctc tcct

24

<210> 17

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> RT-PCR primer 98P4B6.1

<400> 17

gactgagctg gaactggaat ttgt

24

<210> 18

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> RT-PCR primer 98P4B6.2

<400> 18

tttgaggaga cttcatctca ctgg

24

<210> 19

<211> 22

<212> PRT

<213> Artificial Sequence

<220>

<223> STEAP-1 peptide

<400> 19

Arg Glu Val Ile His Pro Leu Ala Thr Ser His Gln Gln Tyr Phe Tyr

1

5

10

15

Lys Ile Pro Ile Leu Val

20

<210> 20

<211> 34

<212> PRT

<213> Artificial Sequence

<220>

<223> STEAP-1 peptide

<400> 20

Arg Arg Ser Tyr Arg Tyr Lys Leu Leu Asn Trp Ala Tyr Gln Gln Val
1 5 10 15
Gln Gln Asn Lys Glu Asp Ala Trp Ile Glu His Asp Val Trp Arg Met
20 25 30
Glu Ile

<210> 21

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> STEAP-1 PEPTIDE

<400> 21

Trp Ile Asp Ile Lys Gln Phe Val Trp Tyr Thr Pro Pro Thr Phe
1 5 10 15

<210> 22

<211> 14

<212> DNA

<213> Artificial Sequence

<220>

<223> cDNA Synthesis primer

<400> 22

ttttgtacaa gctt

14

<210> 23

<211> 44

<212> DNA

<213> Artificial Sequence

<220>

<223> DNA Adaptor 1

<400> 23

ctaatacgac tcactatagg gctcgagcgg ccgcccgggc aggt

44

<210> 24

<211> 42

<212> DNA

<213> Artificial Sequence

<220>

<223> DNA Adaptor 2

<400> 24

gtaatacgac tcactatagg gcagcgtggt cgcgcccgag gt

42

<210> 25

<211> 22
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> PCR primer 1

 <400> 25
 ctaatacgac tcactatagg gc 22

 <210> 26
 <211> 22
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Nested primer (NP) 1

 <400> 26
 tcgagcggcc gcccgggcag gt 22

 <210> 27
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Nested primer (NP) 2

 <400> 27
 agcgtggtcg cggccgaggt 20

 <210> 28
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> RT-PCR primer 1A

 <400> 28
 actttgttga tgaccaggat tgga 24

 <210> 29
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> RT-PCR primer 1B

 <400> 29
 cagaacttca gcacacacag gaac 24

 <210> 30
 <211> 25
 <212> DNA

<213> Artificial Sequence

<220>

<223> primer

<400> 30

atatcgccgc gctcgtcgtc gacaa

25

<210> 31

<211> 26

<212> DNA

<213> Artificial Sequence

<220>

<223> primer

<400> 31

agccacacgc agctcattgt agaagg

26

<210> 32

<211> 15

<212> PRT

<213> Homo sapiens

<400> 32

Tyr Gln Gln Val Gln Gln Asn Lys Glu Asp Ala Trp Ile Glu His

1

5

10

15